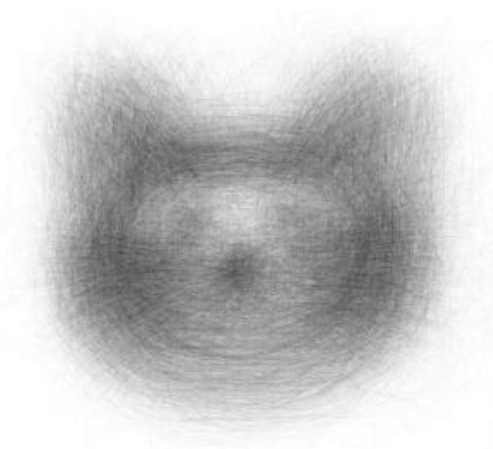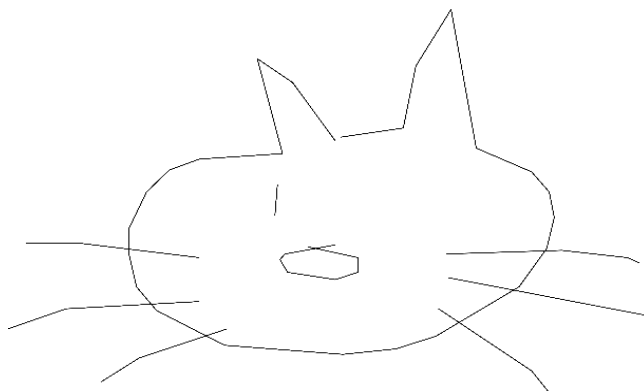VPA 5300: The Digital Humanities in the Arts
Fall 2021
T/Th 11:00-12:20, Theatre 269

Instructor: Dr. David Sears
Office: School of Music, RM 239
Office Hours: T/Th 9:00-11:00am, and by appointment
Contact: david.sears@ttu.edu

Google's **Quick, Draw!** Corpus. Left: A drawing of a cat. Right: A composite rendering of 1,000 drawings of a cat.

Course Description

Faced with a digitized corpus of Elizabethan comedies, the instrumental repertories of the Viennese masters, or the frescoes of the Italian Renaissance, how might computers help us to discover the stylistic features that distinguish Shakespeare from Marlowe, Mozart from Haydn, or Giotto from Raphael? This course examines the emerging role played by corpus-driven methods in arts research. To that end, we will complete weekly readings drawn from interdisciplinary fields like corpus linguistics, systematic musicology, and the digital humanities, and students will receive training in corpus-based methods, but no prior background in statistics or programming is required. Assignments will include (1) a collaborative presentation examining the group's digital arts reception practices (*Digital Reception (Auto)Biographies*); (2) creation of an open-access respository of digitzed music, art, or text data (*Digital Canons*); and (3) a conference proposal and presentation, preferably related to the respository. The latter two assignments may either examine a specific research question pertaining to the digital humanities in the arts, or visualize/sonify digitally encoded data.

Learning Outcomes

Upon successful completion of this course, students will be able to:
- discuss and examine the influence of the digital humanities on arts scholarship.
- recognize, critically evaluate, and apply corpus-driven methods in arts research.
- articulate the current critical, theoretical, and computational problems facing the digital arts/humanities communities.

Course Materials

There is no textbook for this course. Readings are available online on the course slack page (https://vpa5300-dhandarts.slack.com), and the following references are on reserve in the library:

- Attaway, S. (2017). Matlab: A Practical Introduction to Programming and Problem Solving. Kidlington, Oxford, Elsevier.
- Clarke, E. and N. Cook, Eds. (2004). Empirical Musicology: Aims, Methods, Prospects. Oxford, Oxford University Press.
- Cozby, P. C., S. Bates, Eds. (2018). Methods in Behavioral Research. New York, NY, McGraw Hill Education.
- Gold, M. K., Ed. (2012). Debates in the Digital Humanities. Minneapolis, MN, University of Minnesota Press.

Course Requirements

(1) weekly readings, discussion questions, and participation in class discussions; (2) a collaborative presentation examining the group's digital arts reception practices; (3) a repository of digitized music, art, or text data; (4) a conference proposal and oral presentation based on the repository.

Evaluation

1. **Participation: 30%**

    Participants are expected to attend each class session and contribute to class discussion. Assigned readings should be read in advance of each class session. Participants are also expected to prepare (or respond to) a minimum of two discussion questions, which should be posted on the course slack page **at least 12 hours** before each session (**MW, 11pm**).

2. **Digital Reception (Auto)Biographies: 20%**

    Participants will collaborate in groups of two or three to create a short presentation (~15 minutes) using digital presentation software (e.g., Powerpoint) that examines the group's digital arts reception practices using available data. Examples include iTunes playlists, Netflix histories, or Instagram/Pinterest image uploads. (Data may be anonymized.)

3. **Digital Canons: 25%**

    Participants will create an open-access repository of digitized music, art, or text data that (re)examines the traditional canons associated with their discipline(s). The repository should allow the participant to address a specific research question or reflect critically on a topic pertaining to the digital humanities in the arts. It may also consist of works authored by the participant. (Note, however, that the repository should not contain data collected for the *Digital Reception (Auto)Biographies* assignment.)

4. **Conference Proposal and Presentation: 25%**

    Participants will submit a conference proposal using a citation style appropriate for the conferences in their discipline (~1,000 words; 15%). Ideally, the conference proposal should relate in some way to the repository created for the *Digital Canons* assignment. In preparation for the conference proposal submission, the course also culminates in a mini-conference of conference-style presentations pertaining to the conference proposal (10%; ~15 minutes).

Attendance

    Students are permitted two unexcused absences. Each additional absence will reduce the final grade by 1/3 of a letter grade (e.g., a student with three unexcused absences and an A grade would receive an A–). Examples of excuses include illness and religious holidays. I reserve the right to ask for documentation of doctor's visits (though the nature of your illness need not be disclosed).

College Covid Policy

Follow this link for vaccine information, to report a positive COVID-19 result, as well as other related information https://ttucovid19.ttu.edu/User/Consent.

Vaccinations: Texas Tech University strongly recommends students adhere to CDC guidelines onCOVID-19, including obtaining COVID-19 vaccinations. If you were unable to obtain a vaccinationprior to your arrival on campus, the COVID-19 vaccine is available at Student Health Services by appointment. You can find additional information about the vaccine here, and about the recently announced incentive program here.

Face Covering Policy: As of May 19, 2021, face coverings are optional in TTU facilities and classrooms but, based on CDC guidelines, are recommended and welcome, especially for those who have not been vaccinated for COVID-19 or who may have susceptibilities to the virus. Facecoverings are required in public transportation (e.g., Citibus) and in the Student Health Clinic.

Seating Charts and Social Distancing: There is no longer a mandated social distancing protocol for classroom seating but using a seating chart and taking attendance are recommended in support of campus contact tracers if needed. Social distancing is recommended in rooms that will enable it.

In-Person Office Hours: For in-person office hours, masks are recommended and welcome. We can also arrange to meet in a large space or via Zoom.

Personal Hygiene: We all should continue to practice frequent hand washing, use hand sanitizers after touching high-touch points (e.g., door handles, shared keyboards, etc.), and cover faces when coughing or sneezing.

Potential Changes: The University will continue to monitor CDC, State, and TTU System guidelines in continuing to manage the campus implications of COVID-19. Any changes affecting class policies or delivery modality will be in accordance with those guidelines and announced as soon as possible. If Texas Tech University campus operations are required to change because of health concerns related to the COVID-19 pandemic, it is possible that this course will move to a fully online delivery format. Should that be necessary, students will be advised of technical and equipment requirements, such as web cam, microphone, and remote proctoring software.

ADA Compliance-OP34.22

Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note: instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services in West Hall or call 806-742-2405.

Academic Integrity-OP34.12

Academic integrity is taking responsibility for one's own class and/or course work, being individually accountable, and demonstrating intellectual honesty and ethical behavior. Academic integrity is a personal choice to abide by the standards of intellectual honesty and responsibility. Because education is a shared effort to achieve learning through the exchange of ideas, students, faculty, and staff have the collective responsibility to build mutual trust and respect. Ethical behavior and independent thought are essential for the highest level of academic achievement, which then must be measured. Academic achievement includes scholarship, teaching, and learning, all of which are shared endeavors. Grades are a device used to quantify the successful accumulation of knowledge through learning. Adhering to the standards of academic integrity ensures grades are earned honestly. Academic integrity is the foundation upon which students, faculty, and staff build their educational and professional careers. [Texas Tech University ("University") Quality Enhancement Plan, Academic Integrity Task Force, 2010]

Students must understand the principles of academic integrity, and abide by them in all class and/or course work at the University. Academic Misconduct violations are outlined in Part I, section B.1 of the Code of Student Conduct. If there are questions of interpretation of academic integrity policies or about what might constitute an academic integrity violation, students are responsible for seeking guidance from the faculty member teaching the course in question.

Academic misconduct includes cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, violations of published professional ethics/standards, and any act or attempted act designed to give unfair academic advantage to oneself or another student. Additional information about academic misconduct is available in the Texas Tech University Handbook in Part II, section B of the Community Policies section in the Student Handbook at http://www.depts.ttu.edu/dos/handbook/.

a. Cheating
(1) Copying from another student's academic work, test, quiz, or other assignment.
(2) Receiving assistance from and/or seeking aid from another student or individual to complete academic work, test, quiz, or other assignment without authority.
(3) The use or possession of materials or devices during academic work, test, quiz or other assignment which are not authorized by the person administering the academic work, test, quiz, or other assignment.
(4) Possessing, using, buying, stealing, transporting, selling, or soliciting in whole or in part items including, but not limited to, the contents of an unadministered test, test key, homework solution, or computer program/software. Possession, at any time, of current or previous course materials without the instructor's permission.
(5) Obtaining by any means, or coercing another person to obtain items including, but not limited to, an unadministered test, test key, homework solution, or computer program/software, or information about an unadministered test, test key, homework solution, or computer program.
(6) Transmitting or receiving information about the contents of academic work, test, quiz, or other assignment with another individual who has completed or will complete the academic work, test, quiz, or other assignment without authority.
(7) Substituting for another person, or permitting another person to substitute for oneself, in order to take a course, take a test, quiz, or other assignment or sign in/register attendance.
(8) Taking, keeping, misplacing, damaging, or altering the property of the University or of another if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct.
(9) Falsifying research data, laboratory reports, and/or other academic work offered for credit.
(10) Failing to comply with instructions given by the person administering the academic work, test, quiz, or other assignment.
b. Plagiarism
(1) The representation of words, ideas, illustrations, structure, computer code, other expression, or media of another as one's own and/or failing to properly cite direct, paraphrased, or summarized materials.
(2) Self-plagiarism, which involves the submission of the same academic work more than once without the prior permission of the instructor and/or failure to correctly cite previous work written by the same student.
c. Collusion
The unauthorized collaboration with another individual to complete academic work, test, quiz, or other assignment, providing unauthorized assistance to another student, allowing another student access to completed academic work, and/or conspiring with another person to commit a violation of academic dishonesty.
d. Falsifying academic records
(1) Altering or assisting in the altering of any official record of the University and/or submitting false information.
(2) Omitting requested information that is required for, or related to, any official record of the University.
e. Misrepresenting facts
(1) Providing false grades, falsifying information on a resume, or falsifying other academic information.
(2) Providing false or misleading information in an effort to injure another student academically or financially.
(3) Providing false or misleading information or official documentation in an effort to receive a postponement or an extension on academic work, test, quiz, other assignment, credit for attendance, and/or obtain an academic or financial benefit for oneself or another individual.
NOTE: Examples include, but are not limited to, fabricated, altered, misleading, or falsified documentation for medical excuses, family and personal emergencies, and signing into class and failing to remain the entire time.
f. Violation of Professional Standards
Any act or attempted act that violates specific Professional Standards or a published Code of Ethics.

Absence Due to Observance of Religious Holy Day-OP34.19
1. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20.
2. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

3. A student who is excused under section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.

Absence Due to Officially Approved Trips-OP34.04

Department chairpersons, directors, or others responsible for a student representing the university on officially approved trips must notify the student's instructors of the departure and return schedules. The instructor so notified must not penalize the student, although the student is responsible for material missed. Any student absent because of university business must be allowed to make up missed work within a reasonable span of time or have alternate grades substituted for work due to an excused absence. Students absent because of university business must be given the same privileges as other students; e.g., if other students are given the choice of dropping one of four tests, then students with excused absences must be given the same privilege.

Concealed Carry of Handguns on Campus-OP10.22

Last Day to drop a course: The 45th class day is the last day to drop a course. **It is the responsibility of the student to initiate a drop.**

Civility in the Classroom Statement:

Texas Tech University is a community of faculty, students, and staff that enjoys an expectation of cooperation, professionalism, and civility during the conduct of all forms of university business, including the conduct of student–student and student–faculty interactions in and out of the classroom. Further, the classroom is a setting in which an exchange of ideas and creative thinking should be encouraged and where intellectual growth and development are fostered. Students who disrupt this classroom mission by rude, sarcastic, threatening, abusive or obscene language and/or behavior will be subject to appropriate sanctions according to university policy. Likewise, faculty members are expected to maintain the highest standards of professionalism in all interactions with all constituents of the university (www.depts.ttu.edu/ethics/matadorchallenge/ethicalprinciples.php).

Discrimination, Harassment, and Sexual Violence Statement:

Texas Tech University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from gender and/or sex discrimination of any kind. Sexual assault, discrimination, harassment, and other Title IX violations are not tolerated by the University. Report any incidents to the Office for Student Rights & Resolution, (806)-742-SAFE (7233) or file a report online at titleix.ttu.edu/students. Faculty and staff members at TTU are committed to connecting you to resources on campus. Some of these available resources are: TTU Student Counseling Center, 806-742-3674, https://www.depts.ttu.edu/scc/(Provides confidential support on campus.) TTU 24-hour Crisis Helpline, 806-742-5555, (Assists students who are experiencing a mental health or interpersonal violence crisis. If you call the helpline, you will speak with a mental health counselor.) Voice of Hope Lubbock Rape Crisis Center, 806-763-7273, voiceofhopelubbock.org (24-hour hotline that provides support for survivors of sexual violence.) The Risk, Intervention, Safety and Education (RISE) Office, 806-742-2110, https://www.depts.ttu.edu/rise/ (Provides a range of resources and support options focused on prevention education and student wellness.) Texas Tech Police Department, 806-742-3931,http://www.depts.ttu.edu/ttpd/ (To report criminal activity that occurs on or near Texas Tech campus.)

LGBTQIA Statement:

Within the Center for Campus Life, the LGBTQIA Office serves the Texas Tech community through facilitation and leadership of programming and advocacy efforts. This work is aimed at strengthening the lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA) community and sustaining an inclusive campus that welcomes people of all sexual orientations, gender identities, and gender expressions. Please note that resources are available through the Office of LGBTQIA within the Center for Campus Life, Student Union Building Room 201, www.lgbtqia.ttu.edu, 806-742-5433.

Course Schedule
(This is subject to change)

🔲 Digital Humanities   🟦 Music   🟩 Art   🟪 Theatre & Dance

Week 1 – **INTRODUCTION**

(8/24) Welcome / Introduction
PLAY: Quick, Draw!
https://quickdraw.withgoogle.com/
🔲 READING: Johnson, "Drawings in the Cloud"
https://cloud.google.com/blog/products/gcp/drawings-in-the-cloud-introducing-the-quick-draw-dataset
🔲 READING: Jana, "Exploring and Visualizing an Open Global Data Set"
https://ai.googleblog.com/2017/08/exploring-and-visualizing-open-global.html

(8/26) Digital Humanities
🔲 READING: Kirschenbaum, "What is Digital Humanities…" (9 pages)
🔲 READING: Fitzpatrick, "The Humanities, Done Digitally" (4 pages)
🔲 READING: Stanley, "Why is Digital Humanities?" http://scatherinestanley.us/2017/06/why-is-dh

Week 2 – **MOTIVATIONS 1**

(8/31) Social Data & Corpus Studies
🔲 READING: Manovich, "Trending: The Promises and the Challenges…" (16 pages)
🔲 READING: Wilkens, "Canons, Close Reading, and the Evolution of Method" (10 pages)

(9/2) Tutorial – Crawling and Scraping
INTRODUCE: *Digital Reception (Auto)Biographies* Assignment

Week 3 – **MOTIVATIONS 2**

(9/7) Empiricism and Epistemology
🔲 READING: Huron, "The New Empiricism" (42 pages)

(9/9) Tutorial – Statistical Inference
🔲 READING (supplementary): Cozby, "Understanding Research Results" (57 pages)

Week 4 – **MOTIVATIONS 3**

(9/14) Representation
🔲 READING: Hoover, "Argument, Evidence, and the Limits…" (20 pages)
http://dhdebates.gc.cuny.edu/debates/text/71

(9/16) Tutorial – Word Counts in Austen's *Emma*
Software Applications: Matlab, Voyant
Text Analytics Toolbox: ● Importing ● Preprocessing ● Visualizing ● Counting

Week 5 – **TEXT 1 & DIGITAL RECEPTION**

(9/21) Theatre Studies & Content Analysis
🟪 READING: Caplan, "Digital Scholarship and the Future of Theatre Studies (12 pages)
🔲🟪 READING: White & Marsh, "Content Analysis: A Flexible Methodology" (23 pages)

(9/23) Presentations – *Digital Reception (Auto)Biographies* Assignment
DUE: *Digital Reception (Auto)Biographies* Digital Presentation File (e.g., .pptx)

Week 6 – **TEXT 2**

(9/28)   Theatre Studies & Corpus Linguistics
■   READING: Culpeper, "Keywords and Characterization…" (26 pages)

(9/30)   Tutorial – Keyword Analysis / Topic Modeling / Sentiment Analysis
INTRODUCE: *Digital Canons* Assignment

Week 7 – **SOUND & MUSIC 1**

(10/5)   Music Information Retrieval
■   READING: Burgoyne et al., "Music Information Retrieval" (15 pages)
■   READING: McAdams et al., "Analyzing Musical Sound" (pp. 157-179; 22 pages)

(10/7)   Tutorial – Analyzing Audio
READING (supplementary): Lartillot et al., "A Matlab Toolbox…" (8 pages)
Software Applications: Matlab, Sonic Visualizer, Audacity
MIR Toolbox: ● Import Audio (`miraudio`) ● Spectral Analysis (`mirspectrum`)
● Dynamics (`mirrms`) ● Rhythm (`mironsets`) ● Tonality (`mirkey`)

Week 8 – **SOUND & MUSIC 2**

(10/12)   Systematic Musicology
■   READING: Cook, "Computational and Comparative Musicology" (24 pages)
■   READING: London, "Building a Representative Corpus of Classical Music" (22 pages)

(10/14)   Tutorial – Analyzing Scores
READING (supplementary): Eerola & Toivianen, "MIR in Matlab…" (6 pages)
Software Applications: Matlab
MIDI Toolbox: ● Import (`midi2nmat`) ● Visualization (`pianoroll`) ● Statistics (`pdist`)
● Key-finding (`kkkey`)

Week 9 – **IMAGE 1**

(10/19)   The Visual Arts & Big Data
■   READING: Greenhalgh, "Art History" (15 pages)
■   READING: Bentkowska-Kafel, "Debating Digital Art History" (15 pages)

(10/21)   Tutorial – Image Preprocessing
READING (supplementary): Attaway, "Sights and Sounds" pp. 443–456 (13 pages)
Software Applications: Matlab
Image Processing Toolbox: ● Import ● Preprocess ● Edge Detection ● Statistics

Week 10 – **IMAGE 2**

(10/26)   Statistics and Visualization
■   READING, "Manovich, "Data Science and Digital Art History" (25 pages)

(10/28)   Tutorial – Similarity
Software Applications: Matlab
Image Processing Toolbox: ● similarity (`ssim`) ● difference (`imshow`)
DUE: *Digital Canons* Repository (available for download or file transfer)

Week 11 – **THINK TANK**

> (11/2)   Think Tank (Sneak Peeks)
> INTRODUCE: *Conference Proposal and Presentation* Assignment
>
> (11/4)   No class – Conference(s)

Week 12 – **DATA VISUALIZATION 1**

> (11/9)   Networks
> ◻   READING: Weingart, "Demystifying Networks, Parts I & II" (pdf also on slack)
> http://journalofdigitalhumanities.org/1-1/demystifying-networks-by-scott-weingart/
> ◼   READING: Caplan, "Reassessing Obscurity: The Case for Big Data in Theatre"
>
> (11/11) Tutorial – Chord Networks from Popular Music
> Software application: Gephi

Week 13 – **PROBLEMS & DATA VISUALIZATION 2**

> (11/16) Social Justice
> ◻   READING: MacPherson, "Why is DH So White?" (22 pages)
> ◻   READING: Nowviskie, "What Do Girls Dig?" (6 pages)
>
> (11/18) Tutorial – Mapping

Week 14 – **PRESENTATIONS 1**

> (11/23) Presentations
>
> (11/25) No class – Thanksgiving

Week 15 – **PRESENTATIONS 2**

> (11/30) Presentations / Holiday Bake-Off!

Conference Proposal DUE 12/3, 11:59PM AoE

Other Topics/Terms
- artificial intelligence / machine learning
- classification
- clustering (trees)
- application programming interfaces (APIs)
- databases and their languages (SQL)
- encoding (e.g., TEI, MEI)
- markup languages (e.g., html, xml, css)
- mapping (GIS)
- metadata
- sentiment analysis
- social networks
- topic modeling